

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

JACOB J. BOOTH and	:	CIVIL ACTION
KATHLEEN BOOTH, husband and wife,	:	
	:	
Plaintiff,	:	
	:	
v.	:	
	:	
BLACK & DECKER, INC., et al.,	:	
	:	
Defendants.	:	NO. 98-6352

Reed, S.J.

April 12, 2001

MEMORANDUM

Defendant, Black & Decker, Inc., has moved for summary judgment in this products liability case. The motion hinges on the admissibility of plaintiffs' expert testimony concerning whether a toaster oven manufactured by Black & Decker was the cause of a fire that severely damaged plaintiffs' home. Upon consideration of the motion, plaintiffs' response, and the evidentiary record, including the testimony of plaintiffs' expert at Daubert hearings on January 4 and 10, 2001, the motion of defendants will be granted.

Background

On September 13, 1996, the residence of plaintiffs was ravaged by a fire. The parties agree that the fire began in the northeast corner of the kitchen. A number of appliances were located in that area of the kitchen, including a dishwasher, a toaster oven, and a microwave. Plaintiffs assert that the toaster oven caused the fire.¹ The toaster oven was manufactured by Black & Decker, and purchased by plaintiffs approximately three months before the fire took

¹ Plaintiffs have received compensation from their home insurance carrier, and assert in this case the subrogation interests of their insurer.

place.

Plaintiffs assert three causes of action: strict liability, negligence, and breach of warranty. They respond to summary judgment in cursory fashion, with five-page memorandum that relies completely upon and incorporates by reference the arguments and evidence presented by plaintiff in the related case Fanning v. Black & Decker, Civil Action No. 98-6141.² That case was settled as to Black & Decker, and dismissed by stipulation as to Caldor Corporation. Plaintiff in the related case focused on two theories of liability: design defect and manufacturing defect.³ Because plaintiffs in this case rely wholly on the arguments and evidence of plaintiff in the related case, I address here only the arguments and evidence advanced by plaintiff in the related case.

The crux of the motion for summary judgment is whether plaintiffs can prove that the toaster oven was defective and caused the fire; plaintiffs cannot succeed on any of their claims without proving defect and causation. Plaintiffs proffer the expert testimony of Richard B. Thomas, who is prepared to testify that the toaster oven was defective and caused the fire. Black & Decker argues that plaintiffs' expert, is not qualified to give his expert opinion as to a design or manufacturing defect in the toaster oven or the cause of the fire, and that his testimony is otherwise inadmissible.

² That case arose out of the same fire, and was brought by the estate of Edith Fanning, the mother of Kathleen Booth, who was in the home at the time of the fire and died soon thereafter. The estate had alleged that the fire was started by the faulty Black & Decker toaster oven and caused Edith Fanning's death.

³ The Supreme Court of Pennsylvania has recognized both theories as viable under Section 402A of the Restatement (Second) of Torts, which imposes strict liability on the purveyor of a product in a defective condition unreasonably dangerous to the user or consumer. See Phillips v. A-Best Products Co., 542 Pa. 124, 131, 665 A.2d 1167 (1995) (citing Walton v. AVCO Corp., 530 Pa. 568, 576, 610 A.2d 454 (1992)); see also Webb v. Zern, 422 Pa. 424, 427, 220 A.2d 853 (1966).

This Court held two days of hearings on January 4 and 10, 2001, to determine the admissibility of Thomas' testimony, at which Thomas testified and explained photographs and images. Counsel for Black & Decker participated, as did counsel for the estate of Edith Fanning in the related case. Counsel for the Booths, plaintiffs in the instant action, took no part in that hearing, despite having received notice of it.

This Court concluded at the hearing that Thomas was qualified to testify on "matters involving electrical aspects of consumer product electrical devices, including a toaster oven" (Transcript of Hearing on the Admissibility of Expert Testimony from Richard B. Thomas, Document No. 39, Jan. 4, 2001, at 15) ("Thomas Hearing I"). I also concluded that Thomas was qualified to interpret the results of a scanning electron microscope examination. (*Id.* at 109.)

The Court then turned to the questions of methodology and helpfulness to the trier of fact. Counsel for plaintiff in the related case proffered Thomas' testimony to prove that the design of the toaster oven was defective in a number of respects, that there was a manufacturing defect in the toaster, and that one or more such defects caused the fire. (Thomas Hearing I, at 11-12.) The Court expressly invited plaintiff's counsel to elicit testimony concerning the methodology applied by Thomas. (*Id.* at 4.) This Court also asked its own questions of Thomas and at the close of the hearing, invited the parties to bring to the Court's attention any other matters the Court should have addressed but did not. (*Id.* at 85.) Both parties affirmed that no stone had been left unturned. (*Id.*)

Thomas testified that at the outset of his investigation, there were "two candidates for the cause of the fire, a microwave oven and a toaster oven." (Transcript of Hearing on the Admissibility of Expert Testimony from Richard B. Thomas, Document No. 40, Jan. 10, 2001, at

11) (“Thomas Hearing II”). He was asked to examine both of them. He testified about his examination and explained a number of photographs of the toaster. He testified, “The condition of the [toaster] oven is certainly indicative of the – it being the cause of the fire.” (Id. at 17.) Thomas explained his hypothesis of how the toaster oven caused the fire: “[T]he toaster oven overheated as a result of being kept on by a failure of the main power contacts.” (Id. at 18.)

Thomas testified that he had attempted to confirm his hypothesis by examining the power contacts with a scanning electron microscope. This involved removing the contacts from the toaster oven and placing them under a scanning electron microscope to ascertain their condition. Thomas explained that the contacts had indications of melting and scoring, suggesting that the surfaces had welded. (Thomas Hearing II, at 61.)

Thomas also explained that the toaster oven was, in his opinion, defectively designed because it lacked a high-temperature limit switch or thermal cut-off device and because of an abundance of plastic material, which has a low melting point. (Id. at 30-31.) He concluded that a thermal cut-off device, which would shut off the power in the toaster oven when it reached a certain temperature and thus prevent overheating, could “easily” have been incorporated into the toaster oven at issue. He based this conclusion on (1) “general knowledge of the devices and their applications; (2) “the fact that [a thermal cut-off device] was incorporated into a Canadian unit; and (3) on the testimony of one of the manufacturer’s representatives. (Thomas Hearing II, at 46.) Such a device would have, in the opinion of Thomas, “possibly prevented the fire.” (Id.)

Thomas never conducted any testing to determine the maximum temperature that might be reached in the toaster oven. (Id. at 73-74.) Nor did he test his hypothesis by placing the toaster oven in an unregulated condition to determine whether it would start a fire under such

circumstances. (Id. at 83-84.) Thomas did not conduct any testing or make a model of the kind of thermal cut-off device he believed should have been incorporated into the toaster oven. (Id. at 71.)

Daubert Analysis

The admissibility of expert testimony turns on whether the expert is qualified, and whether the testimony meets the two requirements of Rule 702 of the Federal Rules of Evidence, Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 113 S. Ct. 2786 (1993) and Kumho Tire Co., Ltd. v. Carmichael, 526 U.S. 137, 119 S. Ct. 1167 (1999): (1) that the methodology underlying the testimony is valid and (2) that the opinion will be helpful to the factfinder.

Thomas' qualifications are not at issue, and thus, my focus today is on his methodology. To assess an expert's methodology under Rule 702, Daubert and Kumho Tire, a district court must, according to the Court of Appeals for the Third Circuit, be mindful of the following factors: "(1) whether a method consists of a testable hypothesis; (2) whether the method has been subjected to peer review; (3) the known or potential rate of error; (4) the existence and maintenance of standards controlling the technique's operation; (5) whether the method is generally accepted; (6) the relationship of the technique to methods which have been established to be reliable; (7) the qualifications of the expert witness testifying based on the methodology; and (8) the non-judicial uses to which the method has been put." Oddi v. Ford Motor Co., 234 F.3d 136, 145 (3d Cir. 2000) (citations omitted); Elcock v. Kmart Corporation, 233 F.3d 734, 745-46 (3d Cir. 2000) (citations omitted).

Thomas advanced two hypotheses: (1) that a manufacturing defect caused the contacts of the toaster oven became welded together while it was being operated and caused the toaster oven

to overheat and catch on fire; (2) that the toaster oven contained a design defect in that it lacked a thermal cut-off device.⁴ For the following reasons, I conclude that Thomas has not provided sufficient evidence for this Court to conclude that his methodology was reliable.

1. Manufacturing Defect

The method applied by Thomas in his investigation of the alleged manufacturing defect appears to have consisted of a testable hypothesis, but Thomas never tested his hypothesis. Thomas hypothesized that the fire was caused by a spontaneous welding of contacts in the toaster that caused the toaster to overheat and combust. Thomas never attempted to recreate this phenomenon with a similar or identical toaster, something that he conceded could have been done. (Thomas Hearing II, at 83-84.) Thomas' "tests" of his hypothesis consisted of an examination of the subject toaster oven's contacts under a scanning electron microscope, for the purpose of determining whether there was evidence of welding or fusing of the contacts that would have caused the oven to overheat. Thomas concluded that there was "evidence of fusion, melting, and a – a [sic] overall channeling of the surface underlying this condition." (Thomas Hearing II, at 61.) Thomas did not adequately describe why such markings necessarily mean that welding has occurred or offer any source for his conclusion beyond his own personal experience having viewed such markings before and broad and circular assertions that such markings simply are what happens when welding occurs. His observation that "it does not

⁴ Thomas also testified that the toaster oven was defective because of an abundance of plastic materials used to make the toaster oven. However, Thomas offered no explanation in his reports or his testimony before the Court at the Daubert hearing as to how the use of plastics could have caused a fire. He stated that plastic has a low melting temperature, but did not suggest any causal relationship between the plastic and the fire. Because Thomas did not include an opinion concerning the plastic materials in the toaster oven in his expert reports, and because he offered no cogent explanation of how that could have caused the toaster oven to combust, I conclude that his opinion concerning the plastics is not admissible.

require any great mind to understand this thing” (id.) misses the point. The requirements of Daubert and Kumho Tire do not rise and fall with the complexity of each case; whether the expert is testifying on quantum physics or car crashes, the expert must provide the Court with information sufficient to understand and assess the reliability of the methodology the expert applied in reaching her conclusions. Thomas failed to provide such information.

Thomas asserted that his method of investigating the cause of the fire was a standard method applied by others in the field, but he produced no persuasive, objective evidence that this method was subject to peer review, had a known or potential rate of error, could be measured against existing standards, or was generally accepted, as required by Rule 702, Daubert, Kumho Tire, and Oddi. The Court was presented with no evidence, aside from Thomas’ assurances, that others use the methodology he applied in investigating the cause of this electrical fire. Thomas claimed, only at the prompting of defense counsel, that he followed the general methodology of fire investigation established by the National Fire Protection Association, a lengthy and specific document that contains detailed discussions on investigations of everything from motor vehicles and Molotov cocktails to explosions and electrical fires. (Daubert Hearing Defense Exh. 1, National Fire Protection Association, NFPA 921, Guidelines for Fire and Explosion Investigations). Given NFPA 921’s comprehensive and detailed treatment of fire investigations, it appears that NFPA 921 might have contained a methodology upon which Thomas could have relied, but he failed to state that he applied any specific methodology contained in NFPA 921. In discussing his methodology in his testimony and reports, he did not refer to any specific section in NFPA 921. Furthermore, Thomas pointed to nothing in that document that provided a methodology for investigating the hypothesized cause of the fire in this case; the spontaneous

welding of contacts, resulting in the overheating of an electrical appliance. Thus, NFPA 921 offers no help to Thomas.

While there is something intuitively appealing about Thomas' method, there is no evidence that the method he applied was subject to peer review, had a known or potential rate of error, could be measured by existing standards, or was generally accepted. Furthermore, there was no establishment of reliability of the relationship between the technique and the methods. Though Thomas may be qualified to testify on these matters, he did not take sufficient care in supporting the credibility or reliability of the methodology he applied, despite the best efforts of counsel to elicit it. Therefore, I conclude that Thomas' testimony that there was a manufacturing defect in the toaster oven is not admissible.⁵

2. Design Defect

Thomas' proffered methodology concerning the design defect – the failure to include a thermal cut-off device – is equally deficient. Again, Thomas did not test his hypothesis concerning the thermal cut-off device. He did not sketch the kind of device he recommends,

⁵ Plaintiff in the related case, apparently realizing the weakness of the expert testimony, argued that he be allowed to proceed on the more forgiving approach to proving a manufacturing defect, the malfunction theory. Under that theory, Pennsylvania courts have held, a plaintiff may establish the presence of a manufacturing defect through circumstantial, rather than direct, evidence. To prevail under the malfunction theory, a plaintiff must present sufficient evidence of: (1) a product malfunction; (2) plaintiff's use of the product in a manner intended or reasonably expected by the manufacturer; and (3) the absence of other reasonable secondary causes. See Altronics of Bethlehem, Inc. v. Repco, Inc., 957 F.2d 1102, 1105 (3d Cir. 1992). Such evidence may include expert testimony, similar accidents, elimination of other causes, etc. However, where there are multiple possible causes, a plaintiff must at the very least establish a *prima facie* case of causation. See Hamilton v. Emerson Electric Co., No. 00-68, 2001 U.S. Dist. LEXIS 2468, at *10 (E.D. Pa. Mar. 8, 2001) (quoting Dansak v. Cameron Coca-Cola Bottling Co., Pa. Super. , 703 A.2d 489, 497 (1997)). Without expert testimony that the toaster oven might have caused the fire, plaintiff cannot present a *prima facie* case. I have ruled that plaintiff's expert may not testify as to possible defects in the toaster oven that caused the fire, and thus, I conclude plaintiffs cannot present the *prima facie* case they need in order to order survive summary judgment on the manufacturing defect issue, even under the more forgiving malfunction theory.

produce an example of such a device, or do any practical research into how the device could be incorporated into the toaster oven. He did not install a such device on an exemplar oven and test its capacity to prevent the oven from overheating.

Thomas essentially offered no methodology at all for his design defect theory. Instead, He stated that a thermal cut-off device had been included on a Black & Decker oven manufactured and sold in Canada, and thus such a device could have been included on the American model purchased by plaintiffs. While this intuitively seems like a logical conclusion, Thomas provided the Court with no evidence concerning the Canadian toaster oven model, the similarities between that model and the toaster oven at issue in this case. Thus, the Court cannot determine whether Thomas' comparison between the Canadian toaster oven and the toaster oven at issue is relevant, fair, or helpful to the jury. Accordingly, I conclude that the methodology by which Thomas reached his conclusion that the Black & Decker toaster oven contained a design defect did not comply with the minimum requirements of Rule 702, Daubert, and Kumho Tire.

3. Oddi v. Ford Motor Co.

I do not believe I am being overly exacting in my analysis of Thomas' methodologies. The Court of Appeals for the Third Circuit recently affirmed the conclusion of a district court to exclude an expert's testimony as to the cause of an accident involving a truck and a guardrail under Rule 702, Daubert and Kumho Tire in Oddi v. Ford Motor Co., 234 F.3d 136, 145 (3d Cir. 2000). The court of appeals placed great emphasis on the fact that the expert in Oddi never tested his hypotheses, never calculated the force inflicted on the truck that had been involved in the crash, and never measured the strength of the guardrail. See Oddi, 234 F.3d at 158. Instead,

the expert simply examined the damaged truck and concluded it could have been designed more safely. The court of appeals noted that the expert's opinion was "based on nothing more than his training and years of experience as an engineer," and was therefore "*ipse dixit*." Id.

I am similarly unimpressed with the proffered expert testimony in the instant case. Just as with the expert in Oddi, Thomas performed no tests of his own to determine whether his hypotheses were indeed true; he merely examined the toaster oven and concluded it could have been safer. His testimony, like that of the expert in Oddi, seemed wholly based on his own training and experience, and he provided the Court with no objective anchor for his conclusions.

In Oddi, the court of appeals observed, "Although Daubert does not require a paradigm of scientific inquiry as a condition precedent to admitting expert testimony, it does require more than the haphazard, intuitive inquiry that [the expert] engaged in." Oddi, 234 F.3d at 156. Having carefully reviewed Thomas' expert reports and deposition transcripts, and heard his testimony in Court, I find his inquiry into whether the toaster oven caused the fire at issue to be intuitive and haphazard, his methodology to be unreliable, and, consequently, his conclusions to be suspect. Thomas in fact may have conducted a reasonable investigation of the cause of the fire, but he did not provide enough basic, objective information for the Court to so conclude.

For the foregoing reasons, I conclude that plaintiffs have not met their burden of establishing the admissibility of the testimony of their expert, Richard B. Thomas, under Rule 702, Daubert, or Kumho Tire. Therefore, Thomas' expert opinion that the toaster oven contained a manufacturing or design defect that defect caused the fire that damaged plaintiffs' house may not be admitted into evidence.

*Summary Judgment Analysis*⁶

To recover on a theory of strict liability under § 402A, generally, a plaintiff must establish: (1) that the product was defective; (2) that the defect was a proximate cause of the plaintiff's injuries; and (3) that the defect causing the injury existed at the time the product left the seller's hands. See Pavlik v. Lane Limited/Tobacco Exporters Int'l, 135 F.3d 876, 881 (3d Cir. 1998) (Davis v. Berwind Corp., 547 Pa. 260, 267, 690 A.2d 186 (1997)). To survive summary judgment without the expert testimony of their expert as to causation, plaintiffs must produce sufficient evidence for a reasonable jury to find that the toaster oven was defective and caused of the fire.

This, plaintiffs cannot do. The remaining evidence concerning the cause of the fire is inconclusive and does not establish a genuine issue of material fact concerning whether the toaster oven caused the fire. Both parties agree that the fire started in the northeast corner of the kitchen, where a dishwasher, toaster oven, microwave, and possibly other electric appliances were located at the time of the fire. Fire Marshall John Hartnett of the Philadelphia Fire Department conducted a cause and origin investigation immediately after the fire, and concluded that the fire was caused by the microwave oven. (Defendant's Exh. 7, Deposition Testimony of Lt. John Hartnett, Philadelphia Fire Department, Jan. 20, 2000, at 87.) ("Hartnett Deposition").

⁶ In deciding a motion for summary judgment under Rule 56 of the Federal Rules of Civil Procedure, "the test is whether there is a genuine issue of material fact and, if not, whether the moving party is entitled to judgment as a matter of law." Medical Protective Co. v. Watkins, 198 F.3d 100, 103 (3d Cir. 1999) (citing Armbruster v. Unisys Corp., 32 F.3d 768, 777 (3d Cir. 1994)). Furthermore, "summary judgment will not lie if the dispute about a material fact is 'genuine,' that is, if the evidence is such that a reasonable jury could return a verdict for the nonmoving party." Id. at 250. On a motion for summary judgment, the facts should be reviewed in the light most favorable to the non-moving party. See Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 587, 106 S. Ct. 1348 (1986) (quoting United States v. Diebold, Inc., 369 U.S. 654, 655, 82 S. Ct. 993 (1962)).

Plaintiff's expert, James McKendrick, concluded based on the burn patterns he viewed at the scene of the fire that the fire started in the area of the microwave and the toaster oven, but did not conclude independently that the toaster oven was the cause of the fire. (Defendant's Exh. 16, Deposition Testimony of James McKendrick, June 6, 2000, at 184-85.) There is some testimony that the toaster oven was used on the day of the fire (*id.* at 105), but there is also evidence that another toaster was used that morning (Defendant's Exh. 22, Letter from Joel Albert to James McKendrick, July 25, 1997). Furthermore, there is evidence that the microwave had recently been serviced and had been used the night before. (Hartnett Deposition, at 87.)

It is not enough for plaintiffs to create a metaphysical possibility that the toaster oven was a cause of the fire. Instead, to succeed on a product liability claim, plaintiffs must show that there was a defect, and that the defect was the cause of the fire. Without expert testimony, a reasonable jury could not find from this evidence that the toaster oven contained a manufacturing or design defect that defect caused the fire. I have concluded that plaintiff's expert may not testify that there was a design or manufacturing defect in the toaster oven. Therefore, I conclude that there is no genuine issue of material fact as to whether the toaster oven was defective, or whether a defect caused the fire.

Accordingly, summary judgment will be granted in favor of defendants Black & Decker and against plaintiffs Jacob and Kathleen Booth.

Caldor Corporation

There is another defendant in this case: the Caldor Corporation. Caldor was severed from the related case, and later dismissed from that case by stipulation. Magistrate Judge M. Faith

Angell entered an order on June 11, 1999 (Document No. 10), which stated that the plaintiffs in this case, the Booths, had represented that they intended to dismiss Caldor from the case. That order contained a provision under which the parties were to file a stipulation of dismissal as to Caldor. Almost two years have passed since that order was entered, and no stipulation has been filed. Therefore, technically, Caldor is still in this case. I have concluded on the motion of the manufacturer of the toaster oven, Black & Decker, that there no reasonable jury could find on this record that the toaster oven was defective and caused the fire. That conclusion applies with equal force to the Caldor Corporation; plaintiff simply has not established a genuine issue of material fact concerning the defectiveness of the toaster oven sold by Caldor. There is no evidence in the record concerning Caldor, aside from the fact that it sold the toaster oven at issue. Specifically, there is no evidence that Caldor modified the toaster oven or knew it to be defective. I conclude, therefore that defendant Caldor Corporation, to the extent that it remains a defendant in this case at all, is entitled to summary judgment.⁷

An appropriate Order follows.

⁷ I recognize that, in general, a district court may not grant summary judgment *sua sponte* without notice to the parties. See Otis Elevator Co. v. George Washington Hotel Corp., 27 F.3d 903, 910 (3d Cir. 1994). However, this is a unique case in which the liability of the manufacturer and seller are inextricably linked, and the fundamental conclusion that no reasonable jury could find that the toaster oven was defective compels the same result as to each defendant. Considering also plaintiffs' clearly stated, but as yet unrealized, intention to dismiss Caldor as a defendant and the complete inaction of plaintiffs in their claims against Caldor, I believe it is neither improper nor unjust to *sua sponte* grant summary judgment in favor of defendant Caldor.

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

JACOB J. BOOTH and	:	CIVIL ACTION
KATHLEEN BOOTH, husband and wife,	:	
	:	
Plaintiff,	:	
	:	
v.	:	
	:	
BLACK & DECKER, INC., et al.,	:	
	:	
Defendants.	:	NO. 98-6352

ORDER

AND NOW, this 12th day of April, 2001, upon consideration of the motions of defendant Black & Decker, Inc., for summary judgment (Document No. 30) and the response of plaintiffs Jacob J. Booth and Kathleen Booth, and having reviewed the record in this case pursuant to the mandates of Rule 56 of the Federal Rules of Procedure, including the testimony of plaintiffs' expert at Daubert hearings on January 4 and 10, 2001, and having concluded, for the reasons set forth in the foregoing memorandum, that the opinions of plaintiffs' expert concerning defects in the subject toaster oven and the cause of the fire are not admissible under Rule 702 of the Federal Rules of Evidence, Daubert, and Kumho Tire, and having concluded that without the testimony of plaintiffs' expert, there remains no genuine issue of material fact, and having concluded that the evidence is equally insufficient as to defendant Caldor, **IT IS HEREBY ORDERED** that the motion of defendant Black & Decker for summary judgment is **GRANTED** and that the summary judgment is **GRANTED**, *sua sponte*, as to Caldor.

JUDGMENT is hereby **ENTERED** in favor of defendants Black & Decker and the Caldor Corporation, and against plaintiffs Jacob J. Booth and Kathleen Booth.

This is a final Order.

LOWELL A. REED, JR., S.J.